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Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
            20                  25                  30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
        35                  40                  45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
    50                  55                  60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65                  70                  75                  80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
                85                  90                  95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
            100                 105                 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
        115                 120                 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
    130                 135                 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145                 150                 155                 160

Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu
                165                 170                 175

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
            180                 185                 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
        195                 200                 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
    210                 215
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We claim:

1. A method of treating a subject having a tumor; inhibiting, reducing or blocking HER2 signaling; or killing or inhibiting the growth of a HER2-expressing tumor cell, the method comprising administering an effective amount of an antigen binding construct comprising:

a first antigen-binding polypeptide construct which monovalently and specifically binds a HER2 (human epidermal growth factor receptor 2) ECD2 (extracellular domain 2) antigen on a HER2-expressing cell;

a second antigen-binding polypeptide construct which monovalently and specifically binds a HER2 ECD4 (extracellular domain 4) antigen on a HER2-expressing cell;

first and second linker polypeptides, wherein the first linker polypeptide is operably linked to the first antigen-binding polypeptide construct, and the second linker polypeptide is operably linked to the second antigen-binding polypeptide construct;

wherein the linker polypeptides are capable of forming a covalent linkage with each other,

wherein one or both of the first or the second antigen binding polypeptide construct is an scFv, and optionally wherein the antigen binding construct is conjugated to DM1,

wherein the dissociation constant (K_D) of the antigen binding construct to murine HER2 extracellular domain as measured by surface plasmon resonance (SPR) is equal to or less than the dissociation constant of a monospecific anti-HER2 ECD4 antibody (v506; SEQ ID NO:1 and SEQ ID NO:317) to murine HER2 extracellular domain as measured by surface plasmon resonance (SPR), and

wherein tumor growth is decreased as compared to a control receiving an equivalent amount of a non-specific control antibody, as compared to a control receiving an equivalent amount of Herceptin/trastuzumab, or as compared to a control not receiving treatment.

2. The method of claim **1** wherein the antigen binding construct comprises the full length sequences set forth in SEQ ID NOs 97, 295, and 69 (v10000), and optionally wherein the dissociation constant (K_D) of the construct to murine HER2 extracellular domain as measured by surface plasmon resonance (SPR) is approximately 0.6 nM.

3. A method of treating a subject having a tumor; inhibiting, reducing or blocking HER2 signaling; or killing or inhibiting the growth of a HER2-expressing tumor cell, the method comprising administering an effective amount of an antigen binding construct comprising:

a first antigen-binding polypeptide construct which monovalently and specifically binds a HER2 (human epidermal growth factor receptor 2) ECD2 (extracellular domain 2) antigen on a HER2-expressing cell, wherein the first antigen-binding polypeptide construct comprises a first variable light-chain (VL1) domain and a first variable heavy-chain (VH1) domain, wherein the first antigen-binding polypeptide construct comprises VH1 and VL1 CDR sequences that are at least 90, 91,